



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,000	12/09/2005	Ryoichi Matsuoka	0080-0240PUS1	4598
2292	7590	09/20/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			ROBINSON, LAUREN E	
PO BOX 747				
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			1709	
			NOTIFICATION DATE	DELIVERY MODE
			09/20/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/560,000	MATSUOKA, RYOICHI	
	Examiner Lauren E.T. Robinson	Art Unit 1709	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 December 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 December 2005 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9 December 2005.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

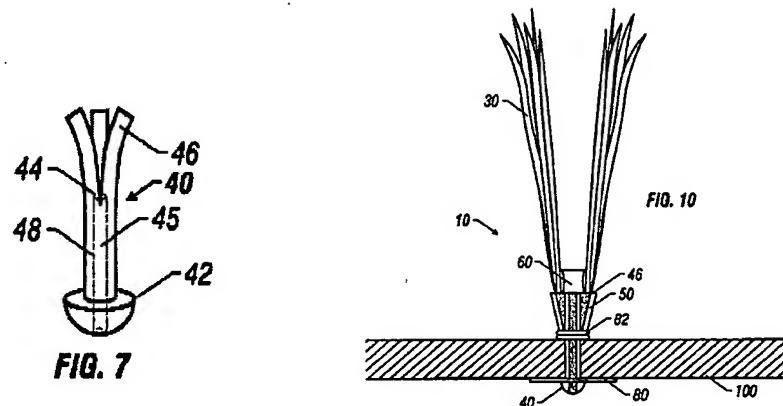
Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over Sallee (US Patent No. 5976643) in view of Constantinescu (US Publication No. 2002/0113346).

Sallee teaches tufts of filaments or strips attached to a material (abstract) wherein the material is preferably an artificial mat-like surface taking the appearance of Astroturf ® (Pg. 2, Col. 2, Par. 1), which is equivalent to the applicant's artificial lawn. Sallee also teaches that the mat-like material has a rigid plastic backing with a plurality of grass-like appendages (polyethylene resin; Pg. 2, Col. 1, Par. 10) coated along the backing with variable bent orientations (Pg. 2, Col. 2, Par. 1). The following illustrations provide clarity.



These figures illustrate an inner rivet (40), a retaining collar (50), and a lock pin (with two ends) (60). The retaining rivet (4) includes one or more longitudinally oriented sectional slots (44) and the said slots form expandable ribs (46). The rivet (40) also includes a surface (48) against which the strips of filaments is pressed. The rivet (40) as seen on the left includes a longitudinally centrally disposed cavity (45) wherein a lock pin is extended through its entire length (Pg. 3, Col. 1, Par. 4). The reference discloses that the filaments are of various materials (Pg. 1, Col. 1, Par. 3) and rolled longitudinally so that the sheets can be placed between portions of the overall retaining anchor (Pg. 2, Col. 1, Par. 1), which in turn attaches to the base material (Pg. 3, Col. 1, Par. 3). When the locking pin is inserted, it keeps the filament material in place (Pg. 4, Col. 1, Par. 1) and as seen in the illustration on the right, the pin is inserted through the center and upper portion of the filament material further parting the filament material on both sides of the retaining anchor.

Due to the attachment of filaments to a root portion pot by a pin member separating the filaments being present and the filaments being rolled and

attached to the base through anchors (planted), then the method (applicant's claim 4) of manufacturing this overall material is inherent. While the method is inherent and Sallee teaches an artificial grass-like material (foliaceous) secured to a base board material (laying board) by an anchor (root pot/portion) with a pin, **he is silent with regard to the pin being bifurcate having two pin tips.**

The examiner notes that this is a staple.

The teaching taught by Constantinescu is referenced for the sole purpose of establishing the ordinary skill in the art at the time the invention was made. While Salle teaches that a pin is used to attach the artificial grass-like filament to a base, Constantinescu discloses that U-shaped staples are a preferred fastener but other base fasteners such as nails, bolts, screws, rivets, pins, glue and equivalents thereof to one skilled in the art can be used to attach something to a base member (Pg. 7, Col. 1, Par. 0062).

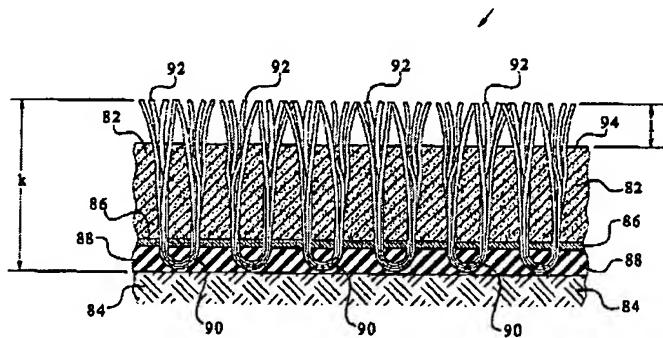
While Sallee is silent with regard to a staple (bifurcate) being used and inserted with guide grooves in a root portion pot (rivet), Constantinescu's disclosure of equally useful fasteners including staples, pins, and rivets shows that it would be obvious to one with ordinary skill in the art at the time the invention was made to substitute the pin taught by Sallee with a staple as they are equivalent fastening means. Also, since the anchor (rivet) in Sallee's teaching has a cavity with peripheral walls and expanding ribs to form around the fastener, then it would have been further obvious that these would encompass the staple as well.

The examiner notes that since the definition of a staple is a U-shaped thin wire that is inserted through a material and then the ends are flattened (folded back) on the other side to use as a fastening, then it would have been further obvious that if one were to use a bifurcate pin (staple) as the fastener, then the ends would be inserted through a material (go in one side and out the other) and then the ends would be folded to hold the item in place. Therefore, if the staple was used as the fastener inserted inside the rivet (root portion pot) as previously mentioned, then it would also have been obvious to one with ordinary skill in the art that the staple ends would pierce through the bottom part of the rivet (root portion pot) and then be folded back which is equivalent to applicant's claim 3.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being obvious over Sallee (US Patent No. 5976643) in view of Constantinescu (US Publication No. 2002/0113346) and Carr et. al. (US Publication No. 2002/0146519).

As discussed above, Sallee teaches tufts of filaments or strips attached to a material (abstract) wherein the material is preferably an artificial mat-like surface taking the appearance of Astroturf (artificial lawn). While it was determined to be obvious above to use the staple taught by Constantinescu as the fastener instead of the pin to attach the filaments to the mat in Sallee's teaching, **Sallee is silent with regard to the filaments being twisted into the shape of a rope and folding the filament in two at an intermediate position in its longitudinal direction.**

Carr et. al. teach an artificial turf made of synthetic fibers (abstract). They also disclose that the synthetic fibers are slit and twisted together (shape of a rope) to form the grass blades through the fabric backing (board) and if the fibers are fibrillated, they remain connected at certain points so when stretched apart (unfastened), they form a mesh (Pg. 3, Col. 1, Par. 0022). The following illustration provides clarity.



From this figure, it is illustrated that the fibers are folded in two at an intermediate position in its longitudinal direction and the reference discloses that the fibers after they are twisted, are stitched into the backing (Pg. 5, Col. 1, Par. 0048). It is also illustrated that the middle portion of the fibers are twisted while the end portions are not. If the filaments are twisted prior to attaching to a base and the ends, as just illustrated, are not twisted then the ends must have been unraveled slightly when the fibers were stretched as previously mentioned. Also, although Carr et. al. discloses that the fibers are stitched into the backing, the idea of attaching the fibers to a mat like base is the same field of endeavor. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sallee's teaching to include that the

fibers/filaments were twisted like a rope, folded in two in its longitudinal direction, and then unraveled slightly after being attached into the anchor rivet (root portion pot).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being obvious over Sallee (US Patent No. 5976643) in view of Constantinescu (US Publication No. 2002/0113346), Carr et. al. (US Publication No. 2002/0146519) and Preston et. al. (US Publication No. 2001/0016244).

Sallee teaches tufts of filaments or strips attached to a material (abstract) wherein the material is preferably an artificial mat-like surface taking the appearance of Astroturf (artificial lawn) as mentioned above. While it was determined to be obvious above to use the staple taught by Constantinescu as the fastener to attach the filaments to the mat in Sallee's teaching, and to twist the filaments, fold them in two in a longitudinal direction and then unravel them after attachment, Sallee is silent with regard to **a filament strand being extended from one root pot to another, the folding of the strand prior to inserting it into the adjacent root pot and then cutting the strand in between adjacent pots.**

Preston et. al. teach a floor covering (abstract) such as roll goods of either woven or tufted fabric (Pg. 1, Col. 2, Par. 0010) to use for mats (Pg. 1, Col. 2, Par. 0012). Preston et. al. also teach that tufted pile yarns are looped through a backing and then extend upward (Pg. 5, Col. 1, Par. 0045). The following illustration provides clarity.

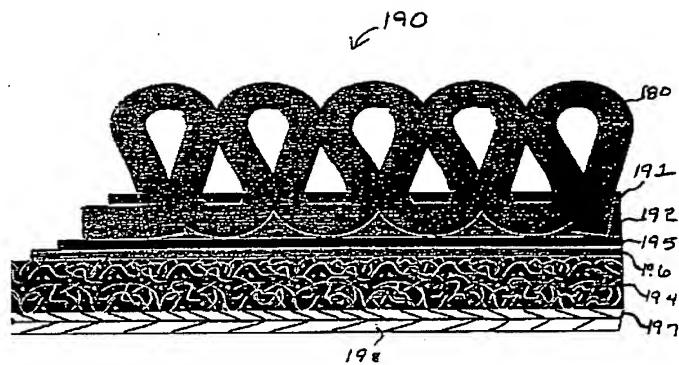


Fig. 8

In this figure, the yarn that is used is a continuous strand and when looped, the yarn is held in place by an adhesive (Pg. 5, Col. 1, Par. 0045). Preston et. al. also teach that once the tufted pile yarns are looped through, the yarns are then cut (Pg. 6, Col. 1, Par. 0053). The following illustration provides clarity.

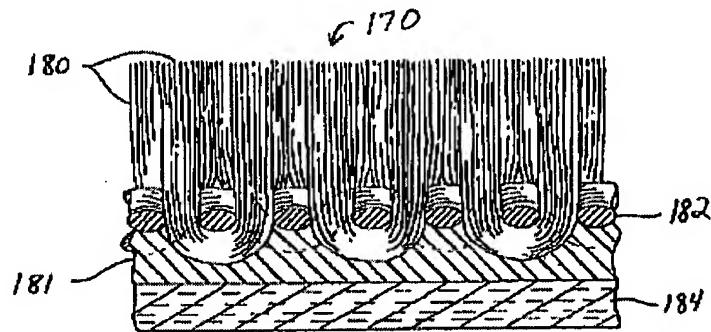


Figure 7

This illustration shows the pile yarn after being cut but the comparison between the this figure and the one provided above shows that a yarn strand was looped through the backing, extended and then looped through another portion of the backing making a fold in two in its longitudinal direction. The yarn was then cut between the adjacent areas of connection to said backing. While the yarns in this reference are looped (stitched) into the backing and Sallee's teaching uses an anchor rivet (root portion pot), it would have been obvious that the yarn could be

looped in and out of the anchor rivet (root portion pot) of Sallee's teaching since the attachment of filaments to a base to form a flooring/carpet/mat is from the same field of endeavor. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to use the loop and cut method of Preston et. al.'s teaching in Sallee's teaching which would include the yarn being long enough to be folded to form a loop, placed in the anchor rivet (root portion pot), extended out of the anchor rivet to another, folded a secondary fold, placed in the secondary anchor rivet, and then cut in between both of said rivets.

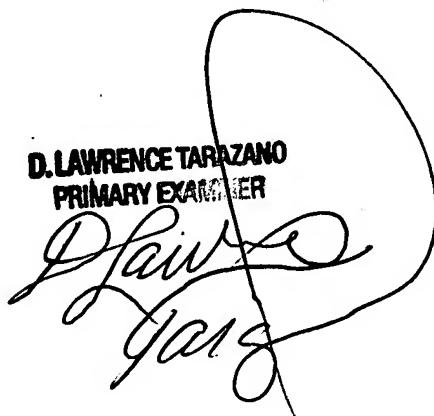
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren E.T. Robinson whose telephone number is (571) 270-3474. The examiner can normally be reached on Mon. through Fri. 7:30 to 5:00 EST (First Fri Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D. LAWRENCE TARAZANO
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "D. Lawrence Tarazano".

Lauren E.T. Robinson
Examiner
Art Unit 1709

A handwritten signature in black ink, appearing to read "L.E.T. Robinson".